

# DEPARTMENT OF THE AIR FORCE AIR FORCE BASE CONVERSION AGENCY

September 25, 1998

MEMORANDUM FOR USEPA, REGION II

ATTN: MR. ROBERT MORSE Federal Facilities Section 290 Broadway, 18th Floor New York NY 10007-1866

FROM: AFBCA/DA Plattsburgh

426 US Oval Suite 2200 Plattsburgh NY 12903

SUBJECT: Landfills LF-021 and LF-024

This is to notify your office that the construction of the caps at Landfills LF-021 and LF-024 have been completed. These landfills will start long-term operations and maintenance (O&M) in October/November 1998. The O&M will be performed by URS Greiner.

If you have any questions, please feel free to contact Mr. Steve Gagnier at (518) 563-2871.

MCHAEL D. SOREL, PE

**BRAC** Environmental Coordinator

cc:

NYSDEC (Jim Quinn)

# CONTRACT PROGRESS REPORT

OMB NO. 9000-0058 Expires Mar 31, 1993

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CONTRACTOR					ADDRESS				
Environmental Construction & Remediation, Inc.					PO Box 21777 Lehigh Valley, PA 18002				
					CONTRACT NO. COMPLETION DATE				
15	FROM: 16 FEB 93 TO: 17 JUL 98 THJW960131			F41624 96					
LINE NO.	WORK ELEMENT					% OF TOTAL JOB	% COMI THIS PE		% COMPLETED CUMULATIVE
1	MOBILIZATION					28.1	0		28.1
2	CLEARING & GRUBBING					6.1	6		6.1
3	GOVERNMENT SOILS PLACEMENT					20,9	0		20.9
4	SITE GRADING, FILLING & BACKFILLING					16.4	0		16.4
5	RIP RAP PLACEMENT					.6	0		.6
6	TURF ESTABLISHMENT					13,3			13.3
7	GEOTEXTILE PLACEMENT					6.5	0		6.5
8	BOND					6.4	0		6.4
9	WORK SUPENSION					1.7	0		1.7
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REMARKS									
At the Contracting Officer's discretion and according to the payments clause of the contract, the information provided on this form may be used for computing progress payments.									
PROGRESS OR COMPLETION CERTIFICATE hereby certify that the contractor has satisfactorily completed the indicated percentage of the contract specifications.									
SUBMITTED BY OR FOR									
CONTRACTOR BASE CIVIL ENGINEER									
TYPE OR PRINT NAME AND TITLE  SIGNATURE  SIGNATURE  SIGNATURE							/	T IS	ju- 98
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# Remedial Action Report Plattsburgh Air Force Base - Operable Unit 10 Plattsburgh, New York

#### Purpose:

The purpose of this report is to provide documentation that remedial action has been completed at Operable Unit 10 at Plattsburgh Air Force Base, Plattsburgh, New York.

## **Site Description:**

Plattsburgh Air Force Base (PAFB) is located within the Town and City of Plattsburgh, Clinton County, New York, approximately 26 miles south of the Canadian border and 167 miles north of Albany, New York. The facility is approximately 3,449 acres in size with an additional 1,292 acres in easements, and is bordered in part by the Saranac River and City of Plattsburgh to the north, the Salmon River to the south, Lake Champlain to the east, and Interstate 87 and State Route 22 to the west. Lands to the east, west, and south of the base are predominantly rural and residential. Approximately 2,000 people obtain drinking water from private wells located within 3 miles of the base.

Operable Unit 10 addresses soil and groundwater at Landfill LF-021 (Site LF-021) at PAFB. Site LF-021 is located near the northwestern border of the facility, and was the second of four landfills utilized at PAFB. The landfill reportedly received domestic wastes and sludge for disposal from 1956 to 1959.

# **PAFB History:**

PAFB served as a tactical (bombardment and air refueling) wing in the Air Force Strategic Air Command (SAC) from 1955 to 1991. In 1991, the bombardment wing was removed and in 1992 operations were realigned to form the 380th Air Refueling Wing under the Air Mobility Command (AMC). PAFB was slated for closure in 1993 under the Defense Base Closure and Realignment Act (BRAC), and the base was closed on September 30, 1995. Reuse of PAFB is being administered by the Air Force Base Conversion Agency (AFBCA) in conjunction with the Plattsburgh Airbase Redevelopment Corporation (PARC) and the Clinton County Industrial Development Agency (CCIDA).

The Air Force has conducted environmental investigations at PAFB since the early 1980s. The Installation Restoration Program (IRP) at PAFB, which involves investigation and cleanup under CERCLA, currently includes a total of forty sites at various stages of investigation and/or cleanup. The IRP is being implemented according to a Federal Facilities Agreement (Docket No.: II-CERCLA-FFA-10201) signed between the Air Force, EPA, and the New York State Department of Environmental Conservation (NYSDEC) on July 10, 1991. PAFB was placed on the National Priorities List (NPL) on July 10, 1989.

# Operable Unit 10 (Site LF-021 Soil and Groundwater) - Site Characteristics

Landfill LF-021 is 5.7 acres in size and is located just inside the northwest base boundary approximately 500 feet south of the Saranac River, and north of the Delaware & Hudson rail line and NY Route 22. From August 1956 to June 1959, LF-021 reportedly was used for the disposal of domestic wastes, and sludge from Plattsburgh AFB's industrial wastewater treatment plant. This plant treated wastewater which included aircraft washrack residues, separating oil, grease, fuel residues, and cleaning compounds. Floc and skimmed residues reportedly were burned in trenches on the landfill before being disposed of and covered with sod. The geology in the vicinity of LF-021 consists of a mantle of heterogeneous unconsolidated glacio-fluvial deposits overlying carbonate bedrock. The unconsolidated overburden deposits consist of two generalized geologic units: (1) brown silty sand, and (2) gray silty sand with some clay, gravel, and cobbles. The landfill material appears to have been placed on top of the unconsolidated deposits. Based upon site reconnaissance conducted from July 1993 through January 1994, it appears that all precipitation either eventually infiltrates into the landfill due to the permeable nature of the fill, or evapotranspirates.

# Operable Unit 10 (Site LF-021 Soil and Groundwater) - Investigation History and Results:

Several investigations were conducted at LF-021 as part of the IRP. In 1985, a Preliminary Assessment (PA) for PAFB determined that further action at the site was not warranted because the domestic waste did not appear to pose a significant threat and no evidence was found to substantiate the dumping of waste oils, solvents, or fuels at the site. A site investigations (SI) was conducted at the site in 1987, however, because it was reported to have received sludge material considered to be potentially hazardous. The SI at LF-021 included a magnetometer survey, an excavation and sampling of test pits, and the installation and sampling of three groundwater monitoring wells. The SI confirmed the presence of contaminants in soil and groundwater. PAFB initiated a remedial investigation (RI) to further define the nature and distribution of the contaminants. The RI was conducted during the summer of 1993 and winter of 1994. Field activities included a terrain conductivity geophysical survey and excavation along ten test trench lines to determine the areal and vertical extent of fill. In addition, field work included the collection and chemical analysis of 14 subsurface soil samples, 6 waste samples, and 18 surface soil samples. Groundwater was sampled and analyzed from each of five new monitoring wells and from three monitoring wells installed as part of the SI.

In soil sampled at the surface of the landfill, one pesticide (aldrin), one PCB, barium, chromium, mercury, and 12 polycyclic aromatic hydrocarbons (PAHs) were detected at concentrations above NYSDEC TAGM soil guidelines. Within the landfill waste, metals detected at concentrations above background included arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. In soil sampled at the base of fill, only benzo(a)pyrene, benzo(g,h,i)perylene, 4,4'-DDT, and mercury were detected above the State soil guidelines. Of the organic contaminants detected in groundwater, only 4,4'-DDT (0.16 ppb) was detected at a concentration in contravention of groundwater ARARs. EPA's maximum contaminant levels (MCLs) for groundwater were not exceeded.

The results of the human health risk assessment indicate that LF-021 poses no unacceptable risk to human health given current conditions for utility maintenance workers and trespassers, but poses a potential risk given a hypothetical future use as a campground. For hypothetical future land use, the total cancer risk for an adult camper was 3 x 10<sup>-4</sup> and the total cancer risk for a child camper is 5 x 10-4. The hazard indices were less than one for the future scenario. The Remedial Action Objective (RAO) for the site is to prevent direct contact with onsite soil/fill by human or ecological receptors. An RAO was not established for groundwater because the low level contamination detected in this medium does not pose a significant risk to human health, although groundwater at the site will be monitored.

### Record of Decision for Operable Unit 10 (Site LF-021 Soil and Groundwater):

On March 25, 1997, EPA co-signed a Record of Decision written by the Air Force for Operable Unit 10 at PAFB. NYSDEC concurred with the remedy. The remedy selected for the site is Native Soil Cap and Institutional Controls. According to the ROD, the 12 inch cap, constructed so as to control surface water runoff and erosion, was to consist of a nine inch borrow layer, three inches of topsoil, and a vegetative cover. The cap is to be inspected annually, with repair/replacement of the cap as required. The institutional controls consist of deed restrictions that will be imposed to:

- Limit development of any structure on the landfill site which would adversely affect human health and safety;
- Prevent any adverse action leading to the deterioration of the cap;
- Prohibit the installation of any wells which could result in use of the underlying groundwater;
- Prohibit any excavation of the landfill cap without prior approval of NYSDEC.
- Restrict groundwater use in the area encompassing the landfill, northward to the Saranac River within the property boundaries.

The remedy also included the installation of one additional groundwater monitoring well, monitoring of the new well and five existing wells for a period of thirty years, Five-Year Reviews, and the development of a post closure plan that would specify more detailed requirements for cap maintenance and inspection, and monitoring.

# Remedial Action Design and Construction:

The Air Force was the lead agency for all remediation activities. Remedial design was performed by URS Greiner Inc. and construction activities were performed by ECR Inc., both through service center contracts with the Air Force Center for Environmental Excellence (AFCEE). Existing vegetation was cleared, grubbed, and removed from the site. The site was then regraded, with burial of any protruding debris and the filling in of low spots. Construction of the cap, which included placement of nine inches of soil borrow and three inches of topsoil, was completed in the Fall of 1997. The vegetative cover was established in the Spring of 1998 and the grass was mowed for the first time in July 1998. Installation of the additional groundwater monitoring well was completed in August 1998. According to the Air Force, site access has been restricted by fencing since the landfill was in use, and appropriate health and safety measures were followed during construction. Air Force and EPA personnel conducted an inspection of the landfill on September 17, 1998, and found the remedial construction to be satisfactorily completed.

# **Operation and Maintenance:**

Operation and maintenance (O & M) and post-closure groundwater monitoring at Site LF-021 is scheduled to begin on October 26, 1998, and shall be conducted based on the LF-021 Post-Closure Monitoring and Maintenance Operations Manual, developed for the Air Force by URS Greiner Inc. Groundwater monitoring is scheduled to be conducted on a quaterly basis.

### **Future Actions:**

The area encompassing this site is designated as "open space/recreation" in the PAFB Reuse Plan. As of the date of this Report, no portion of the site has been included in any of the proposed leases received by EPA, and no portion of the site has been transferred or included in a Finding of Suitability To Transfer (FOST). Deed and lease restrictions implementing the institutional controls specified in the ROD need to be addressed before any property located at the site is transferred or leased. Quarterly groundwater monitoring data will be reviewed by PAFB, EPA, and NYSDEC, and a Five-Year Review will be conducted prior to September 30, 2003 to ensure that the remedy continues to provide adequate protection of human health and the environment. Five-Year Reviews will continue to be conducted as long as hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure.